# OPEN MEETING



ORIGINAL.

MEMORANDUM

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THE COMMISSION

Arizona Corporation Commission DOCKETED

2010 FEB 10 P 3: 38

FROM:

Utilities Division

FEB 10 2010

DATE:

February 10, 2010

DOCKETED BY

AL CURP COMM DOCKET CONTROL

RE:

ARIZONA PUBLIC SERVICE COMPANY - APPLICATION FOR APPROVAL OF

ITS AZ SUN PROGRAM (DOCKET NO. E-01345A-09-0338)

## Background

On July 1, 2009, Arizona Public Service Company ("APS" or "Company") filed its application for approval of its 2010 Implementation Plan ("Plan") pursuant to the Renewable Energy Standard and Tariff ("REST") Rules. On October 16, 2009, APS amended its application to include the proposed AZ Sun Program ("Program"), the development of large APS-owned photovoltaic ("PV") solar generating facilities.

At the January Open Meeting, the APS 2010 Implementation Plan was bifurcated, delaying a decision on the AZ Sun Program until such time as Staff and stakeholders could schedule a technical conference call to analyze issues related to this Program. On January 22, 2010, a conference call did take place and all parties reached concurrence on cost recovery recommendations.

#### The AZ Sun Program II.

The AZ Sun Program will expand APS' procurement approach by undertaking the development of utility-owned renewable projects. Under this proposed Program, beginning in 2010 and continuing through 2014, APS proposes the installation of 100 megawatts of groundmounted solar PV systems. According to APS, the Program may also include utility scale systems located on customer premises, thereby qualifying as distributed energy.

APS points out that utility-owned solar projects offer several benefits:

- Economies of scale and associated volume discounts.
- Placement of resources where they will benefit the distribution system the most.
- Investment tax credits and accelerated tax deprecation that can reduce revenue requirements.
- Easier financing supported by the Company's balance sheet.

- No imputed debt related to Purchased Power Agreements ("PPAs").
- Increased certainty that projects will go forward.

APS states that solar PV is now more suitable for ownership because the systems can be installed quickly as compared to other types of generation resources. Further, the various solar PV technologies themselves are more mature, and costs have come down making solar systems more economically attractive.

APS also states that these systems are the most versatile of the utility-scale generation technologies as they can be designed to consider various shapes and sizes of available land, can be located in the Company's distribution system where feeders are close to capacity or where transmission congestion may be an issue, and can also be scaled to meet the resource needs of the area in which they are situated.

As proposed, APS plans to develop 25 MW a year in each of 2011, 2012, 2013 and 2014. The Company may accelerate development of this capacity if it is reasonable to do so.

Overall, the AZ Sun program entails a capital investment of approximately \$500 million to be made in years 2010 through 2014 to develop the 100 MW of solar generation capacity. This is based on an average solar PV capital cost of \$5.00 per watt and would require an investment of \$125 million for each 25 MW increment of solar resources. The cost of the actual systems deployed will be based on competitive procurement processes, and will likely vary with the size of system facilities. Smaller systems tend to be a greater per-unit cost, while larger sized systems cost less due to economies of scale. APS expects to acquire the resources through a competitive procurement processes beginning in 2010.

APS states that approval of this Program will allow the Company to install these resources quickly and efficiently without additional regulatory filings.

The Company's 2011 Implementation Plan will contain the details of the AZ Sun Program capital investments for at least the first year of the program.

## III. Cost Recovery

APS is proposing that revenue requirements for the AZ Sun Program, including income taxes, depreciation, property taxes, and O&M expenses and financing costs using the then-currently authorized cost of capital, would be recovered through the RES adjustor until the investment is included in base rates or another recovery mechanism.

The revenue requirement that APS calculates for each annual \$125 million investment is estimated to be \$16.1 million in the first year of operation, declining each year over the life of the facilities, like a typical utility investment. APS states that the revenue requirement for each 25 MW increment declines each year to \$5.2 million in the final year of its life and totals \$256 million over the 30-year life of the facilities. The annual amounts would be recovered through

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the RES surcharge until the investment is included in base rates or another recovery mechanism. APS further states that full development of the 100 MW through the AZ Sun Program will require cumulative revenue requirements over 30 years of approximately \$1.024 billion. This amount would be the sum of the revenue requirements for the four 25 MW increments that have a cumulative revenue requirement of \$256 million each.

In Decision No. 71488, the Commission approved the Settlement Agreement ("SA") between the parties in the Company's last rate case. Section XV of the SA involved additional commitments by the Company to invest in renewable energy projects. APS witness Lockwood testified that the new renewable resources required by the SA are in addition to existing resources or commitments as of the end of 2008 as identified in APS' 2008 annual RES Compliance Report.

Subsection 15.7 of the SA provides in part as follows:

All reasonable and prudent expenses incurred by APS pursuant to this Section of the Agreement shall be recoverable through the Power Supply Adjustor, a renewable energy adjustment mechanism, or the Transmission Cost Adjustor, as appropriate. To encourage least cost renewable resources to benefit customers, these expenses would also include the capital carrying costs of any capital investments by APS in renewable energy projects (depreciation expenses at rates established by the Commission, property taxes, and return on both debt and equity at the pre-tax weighted average cost of capital).

Staff believes that the Company's proposals are consistent with the SA, subject to the understanding that the reasonableness and prudency of such costs shall be determined at the Company's next rate case, and that the Company shall be required to refund any amounts that are determined to be unreasonable or not prudent.

APS notes that resources under this program are not likely to commence commercial operation until 2011. As such, the requested 2010 RES adjustor does not include any amounts for the AZ Sun Program revenue requirements.

APS states that it will include an updated budget for this program in its 2011 Implementation Plan as specific resources are identified.

APS states that explicit support for the investment and assurance of cost recovery in this docket, however, will provide the commitment necessary for APS to attract viable projects and successfully arrange the financing necessary for this program to be successful.

## IV. Renewable Energy Standard Rules

APS has indicated that some facilities may be located on non-residential customer premises, thereby qualifying as a Distributed Energy ("DE") project.

The Commission, however, recently ruled, in Decision No. 71459 which stated "IT IS FURTHER ORDERED that Arizona Public Service Company shall be, consistent with the Renewable Energy Standard rules, prohibited from utilizing utility-owned facilities for purposes of meeting the non-residential portion of its distributed generation requirement."

Staff has recommended that the Commission find that the renewable energy produced by utility-owned AZ Sun Program facilities not count toward compliance with the non-residential portion of the distributed renewable energy requirements of the RES Rules.

In response to a Staff Data Request, APS states that it plans to install only utility-scale photovoltaic generating resources as part of the Program. It is Staff's understanding that APS does not propose to develop any facilities for purposes of meeting the residential portion of its distributed energy requirement through the Program.

## V. Staff Recommendations

Staff recommends that APS' AZ Sun Program be approved by the Commission as discussed herein.

Staff recommends that the Commission find that the allocation of RES funding for the return, income taxes, depreciation, property taxes, and O&M expenses of the AZ Sun Program, until the Company's next rate case, as proposed by APS is appropriate and reasonable.

Staff recommends that the reasonableness and prudency of those costs be examined during the Company's next rate case and that any costs determined not to be reasonable and prudent be refunded by the Company.

Staff recommends that the Commission find that the renewable energy produced by utility-owned Program facilities does not count toward compliance with the non-residential portion of the distributed renewable energy requirements of the RES Rules.

Steven M. Olea

Director

**Utilities Division** 

SO:JJP:lhm\WVC

ORIGINATOR: Jeffrey Pasquinelli

1	BEFORE THE ARIZONA CORPORATION COMMISSION
2	KRISTIN K. MAYES Chairman
3	GARY PIERCE Commissioner
4	PAUL NEWMAN Commissioner
5	SANDRA D. KENNEDY Commissioner
6	BOB STUMP Commissioner
7	Commissioner
8	IN THE MATTER OF ARIZONA PUBLIC ) DOCKET NO. E-01345A-09-0338 SERVICE COMPANY'S APPLICATION )
9	FOR APPROVAL OF ITS AZ SUN PROGRAM DECISION NO
10	ORDER
11	\[ -\cdot
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13	Open Meeting March 2 and 3, 2010
14	Phoenix, Arizona
15	BY THE COMMISSION:
16	FINDINGS OF FACT
17	I. Background
18	1. Arizona Public Service Company ("APS" or "Company") is certificated to provid
19	electric service as a public service corporation in the State of Arizona.
20	2. On July 1, 2009, APS filed its application for approval of its 2010 Implementation
21	Plan ("Plan") pursuant to the Renewable Energy Standard and Tariff ("REST") Rules.
22	Supplement to the Plan filed by the Company on October 16, 2009 included the proposed AZ Su
23	Program ("Program"), a large investment in APS-owned photovoltaic ("PV") solar generatin
24	facilities.
25	3. Although the Commission approved the 2010 Implementation Plan wit
26	modification, the Commission's Order provided the following with respect to the Program: "Stat
27	has recommended that a decision on the AZ Sun Program be deferred to no later than the Februar
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2010 Open Meeting in order to more thoroughly analyze the issues related to this Program." Staff recommends approval of the AZ Sun Program subject to conditions discussed herein.

## II. The AZ Sun Program

- 4. AZ Sun is a new part of APS' overall renewable strategy that the Company states will focus on accelerating the development and commercial operation of solar generation resources through utility ownership. Today APS' renewable portfolio consists primarily of Power Purchase Agreements ("PPAs") for renewable resources. The Company states that this is partially a function of the fact that utilities were prohibited from taking the Investment Tax Credit on renewable generation investments. The federal tax laws enacted on October 3, 2008 (as part of the Emergency Economic Stabilization Act of 2008) removed this prohibition.
  - 5. APS points out that utility-owned solar projects offer several benefits:
    - Economies of scale and associated volume discounts.
    - Placement of resources where they will benefit the distribution system the most.
    - Investment tax credits and accelerated tax deprecation that can reduce revenue requirements.
    - Easier financing supported by the Company's balance sheet.
    - No imputed debt related to PPAs.
    - Increased certainty that projects will go forward.

- 6. APS states that solar PV is now more suitable for ownership because the systems can be installed quickly as compared to other types of generation resources. Further, the various solar PV technologies themselves are more mature, and costs have come down making solar systems more economically attractive.
- 7. APS also states that these systems are the most versatile of the utility-scale generation technologies as they can be designed to consider various shapes and sizes of available land, can be located in the Company's distribution system where feeders are close to capacity or where transmission congestion may be an issue, and can also be scaled to meet the resource needs of the area in which they are situated.

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states that ground mounted PV systems can be properly aligned with the available sunlight in order to maximize system production. According to APS, the program may also include utility scale systems located on customer premises, thereby qualifying as distributed energy.

9. In response to a Staff Data Request, the Company states that it views "utility-scale"

APS anticipates the facilities would be ground-mounted solar PV systems. APS

- generating resources to be those with an energy output designed to broadly serve the Company's customer load. "Utility-scale" resources are not necessarily defined to be a specific size, but rather can be developed at any appropriate size, given a range of resource planning and site specific needs and characteristics. "Utility scale" according to the Company, defines a purpose, rather than a size. As part of the implementation of the AZ Sun Program, APS states that it anticipates utility-scale photovoltaic installations ranging in size from 10 MW to 25 MW.
- 10. As proposed, APS plans to develop 25 MW a year in each of 2011, 2012, 2013 and 2014. The Company may accelerate development of this capacity if it is reasonable to do so.
- 11. Overall, the AZ Sun program entails a capital investment of approximately \$500 million to be made in years 2010 through 2014 to develop the 100 MW of solar generation capacity. This is based on an average solar PV capital cost of \$5.00 per watt and would require an investment of \$125 million for each 25 MW increment of solar resources. The cost of the actual systems deployed will be based on competitive procurement processes, and will likely vary with the size of system facilities. Smaller systems tend to be a greater per-unit cost, while larger sized systems cost less due to economies of scale. APS expects to acquire the resources through a competitive procurement processes beginning in 2010.
- 12. APS states that approval of this Program will allow the Company to install these resources quickly and efficiently without additional regulatory filings.
- 13. The Company's 2011 Implementation Plan will contain the details of the AZ Sun Program capital investments for at least the first year of the program.

### III, Cost Recovery

14. APS is proposing that revenue requirements for the AZ Sun Program including income taxes, depreciation, property taxes, and O&M expenses and financing costs using the then-

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currently authorized cost of capital, would be recovered through the RES adjustor until the investment is included in base rates or another recovery mechanism.

- The revenue requirement that APS calculates for each annual \$125 million 15. investment is estimated to be \$16.1 million in the first year of operation, declining each year over the life of the facilities, like a typical utility investment. APS states that the revenue requirement for each 25 MW increment declines each year to \$5.2 million in the final year of its life and totals \$256 million over the 30-year life of the facilities. The annual amounts would be recovered through the RES surcharge until the investment is included in base rates or another recovery mechanism. APS further states that full development of the 100 MW through the AZ Sun Program will require cumulative revenue requirements over 30 years of approximately \$1.024 billion. This amount would be the sum of the revenue requirements for the four 25 MW increments that have a cumulative revenue requirement of \$256 million each.
- Staff Data Request 1.1 asked the Company its position on the appropriateness of 16. establishing an above market cost for utility-owned projects such as the Program, which is similar to the methodology used for PPAs. APS replied that for a PPA, "market" costs are recovered through a combination of the base fuel rate and the Power Supply Adjustor ("PSA"), while above market costs are recovered through the RES adjustor. The combination of the three mechanisms results in full recovery of the PPA cost for APS.
- For an APS-owned project such as the Program, APS states that it would finance 17. the cost of the asset through a combination of debt and equity and incur ownership costs such as property taxes, depreciation and operation and maintenance expenses. The costs cannot be recovered in base rates until APS' next general rate case unless the PSA mechanism is modified to recover more than fuel and purchased power costs. APS states the easiest and most appropriate way of recovering the revenue requirement costs of the AZ Sun Program between general rate cases is through the RES adjustor mechanism. APS believes that allowing for full recovery of costs between rate cases through the RES adjustor will put utility ownership on the same footing as PPAs, which was the intent of Section 15.7 of the Settlement Agreement ("SA") approved in

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Decision No. 71488. APS further states that without this timely recovery of costs, APS likely could not finance its ownership of renewable generation projects.

- In Decision No. 71488, the Commission approved the SA between the parties in the Company's last rate case. Section XV of the SA involved additional commitments by the Company to invest in renewable energy projects. APS witness Lockwood testified that the new renewable resources required by the SA are in addition to existing resources or commitments as of the end of 2008 as identified in APS' 2008 annual RES Compliance Report.
  - 19. Subsection 15.7 of the SA provides in part as follows:

All reasonable and prudent expenses incurred by APS pursuant to this Section of the Agreement shall be recoverable through the Power Supply Adjustor, a renewable energy adjustment mechanism, or the Transmission Cost Adjustor, as appropriate. To encourage least cost renewable resources to benefit customers, these expenses would also include the capital carrying costs of any capital investments by APS in renewable energy projects (depreciation expenses at rates established by the Commission, property taxes, and return on both debt and equity at the pre-tax weighted average cost of capital).

- 20. Staff believes that the Company's proposals are consistent with the SA, subject to the understanding that the reasonableness and prudency of such costs shall be determined at the Company's next rate case, and that the Company shall be required to refund any amounts that are determined to be unreasonable or not prudent.
- 21. APS notes that resources under this program are not likely to commence commercial operation until 2011. As such, the requested 2010 RES adjustor does not include any amounts for the AZ Sun Program revenue requirements.
- 22. APS states that it will include an updated budget for this Program in its 2011 Implementation Plan as specific resources are identified.
- 23. APS states that explicit support for the investment and assurance of cost recovery in this docket, however, will provide the commitment necessary for APS to attract viable projects and successfully arrange the financing necessary for this Program to be successful.

### Renewable Energy Standard Rules

24. APS has indicated that some Program facilities may be located on non-residential customer premises, thereby qualifying as a Distributed Energy ("DE") project.

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- 25. The Commission, however, recently ruled, in Decision No. 71459 which stated "IT IS FURTHER ORDERED that Arizona Public Service Company shall be, consistent with the Renewable Energy Standard rules, prohibited from utilizing utility-owned facilities for purposes of meeting the non-residential portion of its distributed generation requirement."
- 26. Staff has recommended that the Commission find that the renewable energy produced by utility-owned Program facilities not count toward compliance with the non-residential portion of the distributed renewable energy requirements of the RES Rules.
- 27. In response to a Staff Data Request, APS states that it plans to install only utility-scale photovoltaic generating resources as part of the Program. It is Staff's understanding that APS does not propose to develop any facilities for purposes of meeting the residential portion of its distributed energy requirement through the Program.

## V. Staff Recommendations

- 28. Staff has recommended that APS' AZ Sun Program be approved by the Commission as discussed herein.
- 29. Staff has recommended that the Commission find that the allocation of RES funding for the return, income taxes, depreciation, property taxes, and O&M expenses of the AZ Sun Program, until the Company's next rate case, as proposed by APS is appropriate and reasonable.
- 30. Staff has recommended that the reasonableness and prudency of those costs be examined during the Company's next rate case and that any costs determined not to be reasonable and prudent be refunded by the Company.
- 31. Staff has recommended that the Commission find that the renewable energy produced by utility-owned Program facilities does not count toward compliance with the non-residential portion of the distributed renewable energy requirements of the RES Rules.

#### CONCLUSIONS OF LAW

1. APS an Arizona public service corporation within the meaning of Article XV, Section 2 of the Arizona Constitution.

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1	2. The Commission has	s jurisdiction over APS and over the subject matter of the			
2	application.				
3	3. The Commission, have	ving reviewed the application and Staff's Memorandum dated			
4	February 10, 2010, concludes that i	t is in the public interest to approve the AZ Sun Program, a			
5	discussed herein.				
6	·	ORDER			
7	IT IS THEREFORE ORDERED that Arizona Public Service Company's AZ Sun Program				
8	be and hereby is approved as discus	ssed herein and delineated in Findings of Fact Nos. 28, 29, 30			
9	and 31.				
10	IT IS FURTHER ORDERED	that this Decision shall become effective immediately.			
11	BY THE ORDER OF TH	HE ARIZONA CORPORATION COMMISSION			
12					
13	CHAIRMAN	COMMISSIONER			
14					
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16	COMMISSIONER	COMMISSIONER COMMISSIONER			
17		IN WITNESS WHEREOF, I, ERNEST G. JOHNSON			
18		Executive Director of the Arizona Corporation Commission have hereunto, set my hand and caused the official seal o			
19		this Commission to be affixed at the Capitol, in the City of Phoenix, this, 2010.			
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21		EDVECT C. LOUNGON			
22		ERNEST G. JOHNSON EXECUTIVE DIRECTOR			
23					
24	DISSENT:	<u> </u>			
25	DIGGENE				
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		Decision No.			

1	SERVICE LIST FOR: Arizona Public Service Com	pany
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